

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-7, 14-20 and 23-31 are pending in the application, with claims 1 and 7 being the independent claims. Claims 1 and 7 are sought to be amended. Claims 8-13, 21, and 22 were previously cancelled without prejudice to or disclaimer of the subject matter therein. Applicants reserve the right to prosecute similar or broader claims, with respect to the cancelled and amended claims, in the future. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Rejection under 35 U.S.C. § 101

At page 2 of the Office Action, the Examiner rejected claims 1-7, 30 and 31 under 35 U.S.C. § 101 as allegedly not falling within one of the four statutory categories of invention. Applicants respectfully traverse this rejection.

Without acquiescing to the propriety of the rejection, Applicants have amended claims 1 and 7 for other reasons and to expedite prosecution. Claims 1 and 7 recite, *inter alia*, "using a computing device."

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 101 rejection of claims 1 and 7 and pass these claims to allowance. Additionally, at least based on their respective dependencies to claim 1, claims 2-6, 30, and 31 should be found allowable.

Rejections under 35 U.S.C. § 103

Chen and Golitschek

At page 3 of the Office Action, the Examiner rejected claims 1-7 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Chen *et al.* (EP 1130837A2) ("Chen") in view of Golitschek *et al.* (WO 02/058314 A1) ("Golitschek"). Applicants respectfully traverse this rejection.

Claims 1 and 7 recite features that distinguish over the applied references. For example, claim 1 recites, *inter alia*, "**indicating**, using the computing device, the coding rate of a subsequent one or more of the blocks ***using data contained in said one of the blocks***," and claim 7 recites, *inter alia*, "transmitting, using a computing device, a data burst utilizing a unique word and a plurality of blocks, wherein the unique word is variable and **indicates** the transmission scheme of at least one of said blocks, and said at least one block **indicates** the transmission scheme of at least one other of said blocks."

At page 3 of the Office Action, the Examiner states that "Chen et al. does not disclose varying the forward error-correction coding rate among the forward error

Reply to Office Action of April 29, 2009

corrected blocks." However, the Examiner argues that these features are present in Golitschek. Applicants respectfully disagree.

Golitschek discloses "a hybrid [Automatic Repeat Request] ARQ technique for transmitting a data unit on a radio channel in a communication system to a receiver." (Golitschek, abstract.) In Golitschek, "A NAK message informs the transmitter of a decoding error . . . to request a retransmission." (Golitschek, p. 3, lines 6-7 and 18-19.) Golitschek discloses that "measurement values" are "calculated" to adapt the coding rate for transmission of data. (Golitschek, p. 10, line 11 p. 13, line 11.) In Golitschek, "*the adaptation process is limited to some or only one of the code words . . . to reduc[e] the signalling overhead.*" (Golitschek, p. 12, lines 22-29 (emphasis added).) Golitschek further discloses that "[i]f only the first code word is adapted the code rate . . . of the following code words can be *fixed to a higher coding rate*" and "[a]lternatively, the coding rate of the following code words can be explicitly *derived from the coding rate of the first code block.*" *Id.*

However, Golitschek does not teach or suggest "*indicating*, using the computing device, the coding rate of a subsequent one or more of the blocks *using data contained in said one of the blocks*," as recited by claim 1 or "wherein the unique word is variable and *indicates* the transmission scheme of at least one of said blocks," as recited by claim 7 (emphasis added). Rather, Golitschek describes that "the adaptation process is *limited* to some or only one of the code words" and "the following code words can be *fixed to a higher coding rate*" or "*derived from the coding rate of the first code block . . . to reduc[e] the signalling overhead.*" (Golitschek, p. 12, lines 22-29 (emphasis added).) In other words, in Golitschek, the step of "deriv[ing]" the coding rate from the "first code

block" means deriving the coding rate in a *predetermined way relative to* the first coding rate, wherein the first coding rate is determined according to the ARQ technique. In contrast, claim 1 recites "*indicating*, using the computing device, the coding rate of a subsequent one or more of the blocks *using data contained in said one of the blocks*," and claim 7 recites "wherein the unique word is variable and *indicates* the transmission scheme of at least one of said blocks" (emphasis added).

The method of "*indicating* . . . the coding rate," as recited by claim 1 and "*indicat[ing]* . . . the transmission scheme," as recited by claim 7 allows for flexible variation of coding rates (for example, to adapt the coding rate of the compatibilities of different receivers) (emphasis added). On the other hand, in Golitschek, the passages of page 12 Golitschek cited by the Examiner describe how to "limi[t]" the "adaptation process . . . *to reduc[e] the signalling overhead*," as the coding rate of blocks subsequent to the first block are set to coding rates "deriv[able] from" the coding rate of the first block. Nothing in Chen or Golitschek teaches or suggests "*indicating*, using the computing device, the coding rate of a subsequent one or more of the blocks *using data contained in said one of the blocks*," as recited by claim 1 or "transmitting, using a computing device, a data burst utilizing a unique word and a plurality of blocks, wherein the unique word is variable and *indicates* the transmission scheme of at least one of said blocks, and said at least one block *indicates* the transmission scheme of at least one other of said blocks."

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 103(a) rejection of claims 1 and 7 and pass these claims to allowance. Additionally, at least based on their respective dependencies to claim 1,

claims 2-6 should be found allowable over the applied references, as well as for their additional distinguishing features.

Chen, Golitschek, and Thomas

At page 6 of the Office Action, the Examiner rejected claims 14-20 and 23-25 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Chen, in view of Golitschek, and further in view of U.S. Patent Number 6,697,642 B1 to Thomas ("Thomas"). Applicants respectfully traverse this rejection.

At page 6 of the Office Action the Examiner argues, to which Applicants do not acquiesce, that Thomas teaches "a method of transmission over a satellite link between a satellite station and a mobile satellite terminal able to transmit at a selected one of a plurality of different forward error correction (FEC) coding rates wherein a change between successive ones of said FEC coding rates provides a substantially constant change in gain over the satellite link." However, the Examiner does not use Thomas to teach, nor does Thomas teach, at least the above noted distinguishing features of claim 1. Thus, Thomas cannot be used to cure the deficiencies of Chen and Golitschek. Therefore, the applied references cannot be used to establish a prima facie case of obviousness for claim 1.

Accordingly, at least based on their respective dependencies to claim 1, claims 14-20 and 23-25 should be found allowable over the applied references, as well as for their additional distinguishing features.

Chen, Golitschek, and Mantha

At page 10 of the Office Action, the Examiner rejected claims 26-28 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Chen, in view of Golitschek, and further in view of Mantha (WO 01/91407 A1) ("Mantha"). Applicants respectfully traverse this rejection.

At page 10 of the Office Action the Examiner argues, to which Applicants do not acquiesce, that Mantha teaches "a system comprising a transmitter and one or more of a plurality of receivers, wherein the transmission includes a plurality of packets addressed respectively to the receivers." However, the Examiner does not use Mantha to teach, nor does Mantha teach, at least the above noted distinguishing features of claim 1. Thus, Mantha cannot be used to cure the deficiencies of Chen and Golitschek. Therefore, the applied references cannot be used to establish a prima facie case of obviousness for claim 1.

Accordingly, at least based on their respective dependencies to claim 1, claims 26-28 should be found allowable over the applied references, as well as for their additional distinguishing features.

Chen, Golitschek, Mantha, and Siemens

At page 13 of the Office Action, the Examiner rejected claim 29 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Chen, in view of Golitschek, and further in view of Mantha and Siemens (EP 1179897 A2) ("Siemens"). Applicants respectfully traverse this rejection.

At page 13 of the Office Action the Examiner argues, to which Applicants do not acquiesce, that Siemens teaches "a protection method which uses interlacing for FEC blocks and data frames." However, the Examiner does not use Siemens to teach, nor does Siemens teach, at least the above noted distinguishing features of claim 1. Thus, Siemens cannot be used to cure the deficiencies of Chen and Golitschek. Therefore, the applied references cannot be used to establish a prima facie case of obviousness for claim 1.

Accordingly, at least based on its dependency to claim 1, claim 29 should be found allowable over the applied references, as well as for its additional distinguishing features.

Chen, Golitschek, and Vistar

At page 13 of the Office Action, the Examiner rejected claims 30 and 31 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Chen, in view of Golitschek, and further in view of Vistar (WO 99/49592) ("Vistar"). Applicants respectfully traverse this rejection.

At page 14 of the Office Action the Examiner argues, to which Applicants do not acquiesce, that Vistar teaches "a communication system which assigns a plurality of packets addressed to a respective plurality of wireless receivers to a plurality of wireless bearers." However, the Examiner does not use Vistar to teach, nor does Vistar teach, at least the above noted distinguishing features of claim 1. Thus, Vistar cannot be used to cure the deficiencies of Chen and Golitschek. Therefore, the applied references cannot be used to establish a *prima facie* case of obviousness for claim 1.

Accordingly, at least based on their respective dependencies to claim 1, claims 30 and 31 should be found allowable over the applied references, as well as for their additional distinguishing features.

Dependent Claim 26

Dependent claim 26 depends from claim 1 and includes all features therein. Thus for at least this reason, claim 26 should be found allowable over the applied references. Further, claim 26 recites additional features that distinguish over the applied references. For example, claim 26 recites, *inter alia*, "***determining the least capable of the receivers***" and "***selecting one or more parameters of the transmission so as to match the capabilities of the least capable of the receivers***" (emphasis added). At pages 10-12 of the Office Action, the Examiner argues that Mantha teaches these features. Applicants respectfully disagree.

In Mantha, each station reports only its "**reception quality**," rather than its capability. (Mantha, abstract and p.10.) Thus, Mantha does not teach or suggest "**determining the least capable of the receivers**," as recited by claim 26 (emphasis added).

Further, Mantha merely describes that packets are packaged for the worst "reception quality" expected for all of the intended receivers and that the packaging is done "to increase the probability that subscriber stations will be able to receive [them] . . . i.e. - the frame error rate . . . is less than a level selected by the operator of system 20." (Mantha, p. 7, lines 4-16.) Thus, Mantha does not teach or suggest "**selecting one or more parameters of the transmission so as to match the capabilities of the least capable of the receivers**," as recited by claim 26 (emphasis added).

Accordingly, for at least this reason, claim 26 should be found allowable over the applied references.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

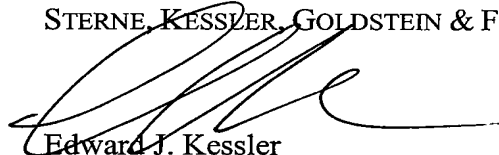
Reply to Office Action of April 29, 2009

TRACHTMAN *et al.*
Appl. No. 10/501,736

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Edward J. Kessler
Attorney for Applicants
Registration No. 25,688

Date: 27 Aug. 2009

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600